

# Rick Hull, Software Engineer

<https://github.com/rickhull>

## Objective

I seek to join a team that builds highly available systems to address important problems and business opportunities. My teammates and I would share my passion for excellence in engineering while recognizing that quality software development is both art and science. My strengths and interest are in the areas of devops, automation, infrastructure, library and API development, and other forms of back-end programming.

## Key Qualifications

- Broad understanding of machine learning techniques
- Several years of hardcore cloud computing experience from inside and out
- Recognition that we live in a distributed world and must (eventually) respond with distributed solutions
- Startup mentality: see a gap, fill a gap (many hats)
- Extensive experience designing and implementing applications, libraries, and tools using object-oriented and functional methodologies
- Rapid absorption and adoption of unfamiliar technologies
- Excellent problem-solving and critical-thinking skills

## Experience

### Senior Software Engineer - Axio Global, Inc

*2021*

- Achieved increasingly advanced front-end development objectives using **React** and **Typescript**
- Rewrote Monte Carlo simulation for monetary impacts of cybersecurity risk scenarios, replacing a misguided and buggy implementation.
- Revamped and documented the onboarding procedure for new devs, reducing time spent from over a week to around a day.

### Driving Instructor - Porsche Experience Center

*2018 - 2024*

- Delivered critical safety and technical information via clear communication to a diverse set of customers
- Built countless trusting relationships to solve problems and ensure the best outcomes, maximizing smiles, satisfaction, and confidence
- Focused on customer success, adapting programs to meet people where they are

### Senior Infrastructure Engineer - Returnly

*2016*

- Revamped AWS infrastructure for hygiene, minimalism, and consistency
- Created async Kinesis (**Kafka**) client for Ruby using **aws-sdk**
- Revamped internal and external schemas for minimalism and consistency
- Created YAML-based autogenerated client integration documentation

## Senior Devops Engineer - Glassdoor

*2015-2016*

- Took ownership of devops/chef repo within one week
- Significantly increased deployment reliability within one month
- Successfully drove a vision of **immutable infrastructure as code** to effective completion
- Instrumental in launch of new **Solr**-based search platform in both **AWS** and **Rackspace** public cloud
- Solely responsible for devops, deployment, admin, security in a **hybrid cloud environment**

## Software Engineer - Cloudscaling

*2013-2014*

- Re-engineered primary **REST API** for improved consistency, predictability, regularity, RESTfulness, discoverability, and simplicity of implementation while maintaining backwards compatibility
- Tackled the massive, hairy problem of testing and verifying the software that provides a cloud platform:
  - Integrating dozens of mostly-independent software projects
  - Building a new cloud for each code change
  - Reducing test cycle durations
  - Isolating test infrastructure failures from product failures
  - Eliminating leftover state between test runs
  - Overcoming nested virtualization and networking issues when the test environment requires virtual nodes to represent physical nodes
- Pushed **Jenkins** to and beyond the breaking point, using tools like **jenkins-job-builder** and **docker** to compensate

## Software Engineer - Planet Payment

*2005-2013*

- Created QA department from scratch
- Built financial transaction clients and servers across a range of formats and framing protocols
- Developed 50kLOC of automation libraries and tools in **Ruby** to facilitate automated testing
- Created black-box regression testing suite, load-testing clients, mock servers, and test harnesses for isolating system functionality
- Developed encoders, decoders, network clients and servers for **ISO8583** and **EIS1080** message formats, among others
- Eliminated points of failure by introducing development and deployment policies

## **Skills**

### **Software Development**

#### **Languages**

- Ruby *10+ years*
  - Rails, Sinatra *2 years*
- Python *2 years*
- Nix
- JavaScript, React, TypeScript, CoffeeScript
- Elixir, Erlang, BEAM
- Perl, PHP, C, Java
- Racket, Scheme, Common Lisp

#### **Tech**

- Hashicorp, Chef, Ansible, SaltStack, Jenkins
- TCP network programming, clients and servers
- Redis, PostgreSQL, MySQL
- AWS and Rackspace cloud automation
- JVM ecosystem
- OpenStack ecosystem

#### **System Administration**

- Linux (Debian / Ubuntu > NixOS > Arch > Red Hat) *10+ years*
- AWS infrastructure as code (+ Rackspace)
- Hashicorp, Chef, Ansible, SaltStack, Jenkins
- Solr, Zookeeper, Rails
- Redis, PostgreSQL, MySQL
- VMware, XenServer, Hyper-V

## **Education**

### **Tulane University School of Engineering**

- B.S. Computer Science
- 3.6 Major GPA

#### **Honors**

- Distinguished Scholar Award *4 years*
- Consistently named to Dean's List *4 years*
- National Merit Scholar
- Lexmark Scholar

*References available upon request*